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NEW GEOMETRIDAE

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SUBFAM. HEMITHEINAE

1. *Gelasma insignipecten* sp.n.

♂ ♀, 39-43 mm. Face dirty olive, with slight (very rarely strong) admixture of blackish. Palpus dark above, whitish beneath; 3rd joint in ♀ distinct, rather over $\frac{1}{2}$. Antenna in ♂ with 36 joints pectinate, the pectinations mostly very long, rapidly shortening distally. Vertex in front whitish. Thorax and abdomen concolorous with wings.

Forewing with apex acute, slightly produced, especially in the ♀; pale dull greenish (almost olive-buff), smoothly scaled; lines, as in the allies (*dissimulata* Walk., *illiturata* Walk., etc.), lunulate-dentate, whitish, bounded in median area by ill-defined deeper green shades; cell-spot moderately strong, rather elongate; no terminal line; fringe grey, becoming pale greenish at tips and with a fine pale line at base.—*Hindwing* with the tail moderately long (about as in *dissimulata*); similar to forewing, 1st line wanting.

Underside whitish with an olivaceous tinge and with faint indications of the olive shades which accompany the lines of upper surface; costal edge of forewing bright ochreous; fringes rather dark grey, pale at tips.

Khasia Hills, the type (May 1896) in coll. Tring Mus.

Readily distinguished from *dissimulata* Walk. by the very long and lax antennal pectinations.

SUBFAM. STERRHINAE

2. *Scopula simplicata* sp.n.

♀, 27 mm. Face brown. Vertex whitish. Thorax and abdomen concolorous with wings.

Forewing moderately broad, apex round-pointed, termen somewhat oblique and scarcely convex anteriorly, roundly bent behind R^2 to become more oblique; whitish, suffused with pinkish buff, copiously irrorated with olive-buff and more sparingly with black-grey; cell-dot black; antemedian line slender, rather weak, from costa at 4 mm., excurved but not perfectly regularly between SC and fold, then curving to become rather less oblique inward; median line twice as broad, but also weak, very gently excurved anteriorly and incurved posteriorly, nearly 1 mm. beyond the cell-dot; postmedian stronger, black-grey, from costa 3 mm.

before apex, faintly denticulate (a little more sharply on SC^5 and R^1), but scarcely blackened on the veins, slightly excurved near costa, then approximately parallel with termen, very faintly incurved between M^1 and SM^2 ; distal area very slightly more shaded with grey, leaving traces of a moderate, somewhat waved, pale subterminal; terminal line black, only slightly interrupted at the veins; fringe concolorous to $\frac{2}{3}$, then paler, the black irroration slightly strengthened so as to suggest a dividing line between the two colours.—*Hindwing* with termen rounded; SC^2 well separate from R^1 at origin; antemedian line wanting; median crossing the cell; postmedian correspondingly rather further from termen; otherwise as forewing.

Underside with the cell-dots and postmedian, the latter on hindwing nearer to termen than above; faint traces of the median; forewing slightly suffused proximally; terminal line grey, with blacker interneural dots.

N.E. Africa: Ganale River, 11 April 1901 (C. von Erlanger). Type in coll. Tring Mus.

Akin to *fulvicolor* Hmps. (*Nat. Hist. Socotra*, p. 331), scarcely so broad-winged, much paler, postmedian not appreciably sinuate inward nor so punctuated on the veins.

3. *Scopula erymna* sp.n.

♀, 22 mm. Face and part of palpus brown mixed with black; first joint of palpus and underside of second whitish. Vertex and patagia white; collar light buff-brown. Thorax and abdomen concolorous with wings.

Forewing with costa gently arched in distal one-third, apex moderate, termen smooth, slightly bowed, moderately oblique; SC^1 from areole close to its apex, SC^5 and stalk of SC^{2+4} connate from its apex; whitish vinaceous-pink, with rather copious wood-brown and sparse fuscous irroration; antemedian line fine and faint, brown, oblique outward from one-third costa, acutely angled on cell-fold, then oblique inward to scarcely one-third hindmargin; cell-dot minute, blackish; median line blackish fuscous, rather weak and outbent close to costa, otherwise strong and with a duplicating fuscous shade distally, slightly incurved between the radials, here little beyond the cell-dot, between M^1 and SM^2 very gently incurved, its general course parallel with termen; postmedian blackish fuscous, crenate, not quite parallel with median, receding slightly from it at its subcostal bend; a wood-brown or somewhat cinnamon shade in distal area except anteriorly to SC^2 , reaching tornus but posteriorly somewhat mixed with the ground-colour; a rather thick dark-brown terminal line, scarcely interrupted at the veins; fringe with a rather strong, though slightly interrupted, blackish-fuscous dividing line, proximally and distally hereto whitish mottled with grey and (at least proximally) with some sparse brown irroration.—*Hindwing* with termen not bent at R^3 , only made prominent here by an extremely slight reduction of convexity between R^1 and R^3 ; concolorous with forewing; no antemedian line; median almost straight, more proximal than on forewing, its outer shade narrow, forming a rather diffuse second line, which continues the true median of forewing; postmedian much as on forewing, but scarcely oblique from costa to R^1 ; distal clouding scarcely developed, but reaching costa; termen and fringe as on forewing.

Underside uniform light brown (under the lens whitish suffused with brown), with fine fuscous irroration; both wings with minute black cell-dot and with

median and postmedian lines, the former on hindwing crossing the cell-dot ; forewing also with a vague diffuse subbasal band ; terminal line rather lighter brown than above ; fringes nearly as above.

Gurra : Dagaje, 4-5 April 1901 (C. von Erlanger). Type in coll. Tring Mus., together with a dwarf (second-brood ?) ♀ from Woreda, Ganale River, 10-11 June 1901 (collected on the same expedition).

Probably near *bigeminata* Warr. (NOV. ZOOL. iv. 50), in spite of the very different course of the lines.

4. *Scopula internataria eucentra* subsp.n.

♂ ♀, 20-23 mm. Somewhat variable in colour, but always with an appreciable tinge of vinaceous or flesh-colour. Markings in general more sharply expressed than in name-typical *internataria* Walk., particularly the vein-dots or minute teeth on the postmedian line, that of the forewing on R² rather markedly proximal.

Madagascar : Diego Suarez, January-September 1917 (G. Melou), a long series in coll. Tring Mus. Also a few from Kulau and Sakaramy, in the same district.

I regard as *internataria* Walk. (*List Lep. Ins.* xxii. 746) the African species of the *nesciaria* group in which the hindtarsus of the ♂ is rather less than one-quarter tibia, with rather dense whitish pencil. But it is possible in this extensive and extremely difficult group that more minute anatomical research may show more than one species to possess this character.

5. *Scopula empera* sp.n.

♂ ♀, 14-18 mm. Like the preceding but smaller, with termen of forewing (at least in the ♂) appreciably straighter, causing the apex to appear more pointed, the lines in general weaker (sometimes a good deal suffused), the postmedian more excurved subeostally, not or scarcely black-marked on the veins, the tarsus of the ♂ shorter still ($\frac{1}{3}$).

Madagascar : Diego Suarez, January-August 1917 (G. Melou), a good series in coll. Tring Mus.

6. *Scopula gaudialis* sp.n.

♂ ♀, 18-23 mm. Face black. Palpus black, beneath pale. Vertex whitish buff. Collar ochreous. Antennal shaft tinged with ochreous, proximally with blackish dots above ; ciliation in ♂ over 1. Head and body concolorous with wings. Hindtibia of ♂ strongly dilated, with dense hair-pencil, the tarsus fully as short as in the preceding species.

Forewing with apex moderate, termen very gently curved ; ochreous, densely irrorated with rufous, producing generally a similar tone to some *Sterha* (*ochrata* Scop., etc.), slightly variable ; the small cell-dot and terminal dots black ; lines more greyish rufous, fine, the median variable, generally more diffuse, sometimes weak, always well beyond the cell-dot and a little incurved in posterior part ; antemedian proximal to one-third, somewhat excurved anteriorly, generally slightly incurved posteriorly ; postmedian about 2 mm. from termen, not or scarcely punctuated on the veins, weakly sinuous, the inward curves in the usual positions ; subterminals scarcely developed, the subterminal itself faintly pale ; fringe proximally concolorous or more ochreous, distally

paler, sometimes tinged with vinaceous, centrally with some minute black dots. —*Hindwing* with termen not or scarcely bent in middle; first line wanting; median incurved round the cell-dot, angled outward on base of R^3 ; the rest as on forewing.

Underside paler, more weakly marked; the cell-dots and (especially on forewing) the lines beyond more or less developed.

Comoro Islands, May–September 1911 (G. F. Leigh): Anjouan (loc. typ.), Grande Comoro, and Mayotte, a good series in coll. Tring Mus.

SUBFAM. LARENTIINAE

7. *Lobogonia ambusta salvata* subsp.n.

“*Lobogonia ambusta* Warr.” Prout in Seitz, *Macrolep.* iv. 191, t. 11d (W. China).

Less warm in tint than name-typical *ambusta* Warr. (1893, Khasis), more as in the differently shaped *formosana* Bastelb. (1909); dark maculation in general less developed than in the Khasi examples, postmedian line more curved before middle, on underside of forewing generally double.

W. China: Kankala-shan, Szechwan, type in coll. Tring Mus.; Pu-tsu-fong, etc., 8♂♂ in coll. Brit. Mus.

8. *Sauris curvicosta* sp.n.

♀, 29 mm. Differs from *elaica* Meyr. (*Tr. Ent. Soc. Lond.* 1886, p. 193, Fiji), to which Warren referred it, as follows:

Second joint of palpus less long, its length less than $1\frac{1}{2}$ times the diameter of the large eye (in *elaica* fully twice). Wings rather shorter. Forewing with more rounded costa, more proximal subbasal line, two or three well-developed dark lines from M to SM^2 between subbasal and antemedian. Hindwing and underside darker.

Loyalty Islands: Lifu, 2♀♀ in coll. Tring Mus.

SUBFAM. GEOMETRINAE

9. *Ischnopterix xylinata ockendeni* subsp.n.

♂. Forewing appreciably darker than in *x. xylinata* Guen., from S.E. Brazil, with more of a purplish tinge. Hindwing with the distal border similarly darkened and almost or quite solid as far as the termen, whereas in *x. xylinata* it is subterminal, the termen being almost of the ground-colour.

S.E. Peru, Carabaya: Oconeque, 7,000 ft., type and another in coll. Tring Mus., 1♂ in coll. Brit. Mus., 1♂ in coll. L. B. Prout; Tinguri, 3,400 ft., 1♂ in coll. Tring Mus.

As the antennal pectinations appear slightly more rudimentary still than those of *x. xylinata*, it is possible that this form will have to rank as a species; but the rest of the structure and the entire pattern seem exactly as in that species.

10. *Ischnopterix callistrepta* sp.n.

“*Ischnopterix discolor* Warr. ♂.” Warr. *Nov. Zool.* xiv. 287 (1907) (nec Warr. *Nov. Zool.* xi. 557).

♂, 52–56 mm. The upperside of the type form well described by Warren (*Nov. Zool.* xiv. 287), except that the basal area of the forewing is in reality

much clouded with the same "dark purplish fuscous" as the central area and that the hindwing, except proximally, is more fleshy than "ochreous." Under-side not "exactly like that of the ♀" of *discolor*: the forewing in the darkest (the type) form fairly similar to that of the species named, but with a distinct black cell-dot and with the pale outer area broader, more fleshy, less elouded with dark-grey in the middle, the terminal black dots sharper; hindwing likewise more fleshy, the median and postmedian lines (especially the former) better expressed, more parallel, the subterminal dark shade subobsolete, chiefly indicated between R^2 and M^1 .

Variable, like most *Ischnopterix*, the 3 ♂♂ from the rather less extreme altitude averaging larger, the forewing beneath less suffused with grey, one example also lighter (more reddish) above, with broadened green sinuous band outside the postmedian, etc.

♀, 62 mm. Slightly narrower-winged than the ♂. Forewing with the "purplish fuscous" and "purplish red" parts fleshy brown, almost concolorous with the distal part of the hindwing, the broad dark median line in consequence showing up strongly, acutely bent outward behind cell-fold and still more strongly, though roundly, at SM^2 .

S.E. Peru, Carabaya: Limbani, 9,500 ft., April 1904, type ♂, May 1904, allotype ♀; Agualani, 9,000 ft., April 1905, 1 ♂, December 1905, 2 ♂♂. All in coll. Tring. Mus., collected by G. Ockenden.

I am at a loss to conceive how Warren confounded this fine species with the much smaller, duller, relatively shorter-winged *discolor*, of which the true ♂ is clearly *conjungens* Warr., Nov. Zool. xii. 59. As regards structure, *discolor* belongs to the group in which the long stalk of SC^{r2} of the forewing is free from C, *callistrepta* to that in which it is connected by a bar.

11. *Ischnopterix obtortionis* sp.n.

♂, 42-43 mm. Hindtibia with moderate pencil. Abdomen long and slender, but less extremely elongate than in the ♂ of *chlorata* Hb. Head and body above dull olive-green, somewhat mixed with brown, white and black, the abdomen with a pair of black spots on first tergite, then with single black spots; body beneath whitish buff.

Forewing shaped about as in the *chlorata* group, but with an appreciable prominence just proximal to the middle of the hindmargin and with a tuft of dark-grey hair projecting hindward from this prominence; the long stalk of SC^{r2} connected by a bar with C; olive green, in places more glaucous green, mostly much mixed with red-brown and sprinkled with dark scales, the ground-colour remaining clearest in basal area, in costal region, narrowly along termen and more broadly in a posterior postmedian patch; lines very vaguely indicated in red-brown; antemedian zigzag and very oblique; median inbent just behind SC, then straight and very oblique outward to base of R^3 , this tract alone clear, being margined distally by a greenish patch; a dentate pale, in places white, subterminal, with the deepest indentation at SC^2 ; some black marks proximally to it, at least anteriorly; terminal line sinuous, thickened into black dots between the veins, almost interrupted at the veins.—*Hindwing* narrow, with costal margin long, termen waved, between M^1 and tornus subconcave, abdominal region much as in *multistrigata* Warr. (Nov. Zool. xvi. 103) but rolled into a more definite pale pocket above at the abdominal margin; pinkish buff, suffused

with grey, leaving a clearer region between postmedian line and distal band anteriorly; specialized sealing of abdominal region black, the long overlapping hair from M somewhat buff; postmedian line dark grey, straight from costa to R^2 , here bent; a dark distal band, enclosing ill-defined pale spots at termen.

Underside cream-colour to Naples yellow, both wings sharply marked with blackish except posteriorly; forewing with thick oblique median line and a shorter one (SC to M) outside the cell, hindwing with postmedian nearly as above; both wings with irregular subterminal band and whitish midterminal patch.

E. Bolivia: Buenavista, 750 m., August 1906—April 1907 (Steinbach), 2 ♂♂ in coll. Tring. Mus. A rather smaller ♀ from La Union, Carabaya, S.E. Peru, in poor condition, seems to agree essentially except in the sexual characters.

12. *Pero longisecta* sp.n.

♂ ♀, 42–45 mm. Probably nearest to *fortunata* Dogn. (*Le Nat.* xiv. 186) = *molionaria* Oberth. (*Et. Léop.* vi. fig. 1554), but very distinct. Palpus with third joint rather shorter, mostly concealed by the rough hair of second joint. Antenna of ♂ (as in *fortunata*) simple.

Forewing narrower than in *fortunata*, with the termen decidedly more oblique; shadings, as in *fortunata*, in the ♂ ochreous, in the ♀ more rosy, but in both sexes weaker, the grey irroration being very strong, laid on in close transverse strigulae; a very conspicuous pale longitudinal streak in front of M from near base to beyond postmedian, recalling that of *Meticulodes spongiata* Guen. or even of *Pero algeria* Schaus, broadest and clearest in cell; cell-spot black, single, with a patch of raised grey scales at its distal side; antemedian line strongly oblique outward to the pale streak, inward behind it, rather uniformly thick except for its central interruption; postmedian oblique outward; three white dots near termen between costa and R^2 , almost equal in development, posterior ones obsolete.—*Hindwing* with the suffusions in both sexes ochreous; postmedian line rather more strongly bent behind than in *fortunata* and here rather more closely approximated to termen.

S.E. Brazil: Ypiranga, Sao Paulo, September 1922 (R. Spitz), type ♂ and 3 ♀♀ in coll. Tring. Mus.; Castro, Parana (E. D. Jones), 2 ♂♂ in coll. Brit. Mus.

13. *Pero obtusaria* sp.n.

♂, 36 mm. Head and body greyish, inclining to light drab, face and the thorax above darker, collar slightly more buff. Antenna simple. Abdomen not robust.

Forewing relatively rather short, apex rather blunt, termen waved, from apex to R^3 hardly oblique, here curved, becoming moderately oblique; greyish, inclining to light drab, with vague darker strigulation and scattered fuscous scales; basal region slightly clouded; a whitish cell-mark, with a black dot on DC^2 ; antemedian line from costa at 5 mm., oblique outward, forming a very strong outward curve in cell, the retracted along M, with a strong dark spot between this and a second, slighter, posterior curve outward; a smaller dark spot close outside the antemedian just behind SC; a fine whitish postmedian from costa 3.5 mm. from apex, somewhat oblique inward (very slightly more so at costa than subsequently), straightish to fold, then obtusely bent (curved) to run strongly oblique inward to hindmargin; a dark shade accompanying this

line proximally, narrow at its ends but broadening between SC⁵ and hindmargin, reaching its maximum width (fully 2 mm.) about M²; a weaker and more slender dark shade distally to the postmedian from costa about R²; subterminal shade suggested by absence of strigulation, broad behind R¹, weak at hindmargin and especially at costa; whitish, proximally dark-edged dots close to termen in cellules 7, 6, 5, 3, and 2, the last two the strongest.—*Hindwing* with costa moderately long, termen gently waved; pale at costa; mostly overlaid with drab; cell-dot weakly indicated; a whitish postmedian line, weak anteriorly, strong posteriorly, placed near termen at abdominal margin and especially about M², strongly curved, receding rapidly from termen anteriorly; some dots close to termen, much as on forewing.

Both wings beneath paler and weaker-marked posteriorly than anteriorly; principal markings of forewing indicated, though shadowy; hindwing with twin cell-dot and with postmedian line developed from costa to radials, wavy, dark-edged proximally; dots near termen developed.

Peru: Lima-Matucana districts (A. M. Moss, type in coll. Tring Mus.; Callao, 1 ♂ in coll. Brit. Mus., named "*obtusaria* Warr." (MS.) over 30 years ago.

In shape perhaps nearest to a rather broad-winged *jonesaria* Schaus (1897), from which the straighter postmedian will at once distinguish it.

14. *Pero alticola* sp.n.

♂, 44–49 mm. Intermediate between *scitaria* Oberth. and *variaria* Walk. (= *jamaicensis* Schaus). In shape and colour nearer to the latter, the teeth in the fringes being well appreciable and the ground-colour warmer brown than in *scitaria*.—*Forewing* much less variegated than in *variaria*, the median area having less black admixture and the pale band between it and the subterminal being less clear, more suffused, especially anteriorly; distinct from both in having the double black cell-mark highly developed, more as in *mathilda* Butl., *semiusta* Butl., etc., the anterior mark generally thicker than the posterior and extremely oblique, the two sometimes connected; a bright orange-brown or yellow-brown patch always conspicuous between it and the postmedian, rarely so conspicuous proximally to it; a straightish postmedian line or shade proximally to the true postmedian always more or less distinct, cutting the orange patch; the true postmedian appreciably less sinuous than even in *scitaria*.—*Hindwing* with the characteristic admarginal dots of *variaria* above and beneath poorly or not developed.

S.E. Peru, Carabaya: Agualani, 9,000 ft., common, including the type; Limbani, 9,500 ft.; Oconeque, 7,000 ft., 2 ♂♂; La Union, 2,000 ft., 1 ♂.

I do not think this can be *elmorjensis* Dogn. (*Ann. Soc. Ent. Belg.* xlv. 232), as its author emphasizes the *projecting* postmedian line.

15. *Pero scitaria crepera* subsp.n.

♂. Appreciably broader-winged than typical *scitaria* Oberth. (*Et. Ent.* vii. 27, t. iii, f. 10). Coloration darker both above and beneath, notably on the hindwing, which has the pale areas beneath more restricted, and in particular the apical region remaining dark, so as to bring into strong relief the subapical white dot or dots, which in *s. scitaria* are generally scarcely noticeable.

Colombia: Monte Tolima, 2,700–3,200 m. (A. H. Fassel), a short series in coll. Tring. Mus.

16. *Pero cinnamomina* sp.n.

♂, 40 mm. Antenna simple, rather long. Thorax above cinnamon, body otherwise pinkish buff to light pinkish cinnamon, anterior abdominal tergites marked with cinnamon and blackish. Abdomen slenderer than in *jonesaria* Schaus.

Forewing scarcely so broad as in *jonesaria*, with termen slightly less convex, slightly more waved and appearing still more so by reason of the presence of conspicuous dark spots on the fringe at the ends of the veins; pale buff, clouded with pinkish cinnamon; markings nearly as in *minopenaria* Oberth. (*Et. Lép.* vi. 297, f. 1547); cell-dots small, equal, well separated; shades accompanying the lines cinnamon, not conspicuous; postmedian line still straighter from costa to M²; proximal subterminal shade more parallel with termen than in *minopenaria*, terminal shade almost obsolete, replaced by stronger interneural dots than in *jonesaria*.—*Hindwing* at abdominal margin above more cinnamon than in *minopenaria*, the postmedian line above and beneath more curved, complete (though very weak above); interneural dots near termen almost as on forewing.

Lima—Matucana districts, type ♂; Lima—Chanchamayo, 3 ♂♂, 2 ♀♀ of a larger form or very close ally, none in such fresh condition as the type. All in coll. Tring Mus., collected by Rev. A. M. Moss.

Both *cinnamomina* and *minopenaria* (= "*jonesaria* Schaus" of Prout, *Tr. Ent. Sc. Lond.* 1910, p. 313, and Dognin, *Ann. Soc. Ent. Belg.* lvii. 69, pr. p.) differ from *jonesaria* in their rather less broad forewing, less dark colouring, absence of the characteristic acute inward tooth of the postmedian of the forewing on SM². From *obtusaria* Prout (*supra*), from the same district, *cinnamomina* differs in shape, coloration, etc., though the two show considerable resemblance in the form of the postmedian line of the forewing.

17. *Pero kayei* sp.n.

♂, 48–51 mm.; ♀, 53 mm. In its size and general coloration—particularly of the ♂ beneath and the ♀ above—reminiscent of *bicolor* Warr. (*Nov. Zool.* ii. 137). Antenna of ♂ simple, as in that species. Termen of forewing rather less oblique, of both wings with the teeth less strong.—*Forewing* of ♂ above rather dark cinnamon, the median area slightly shaded with purple and somewhat darkened distally, but without the rich varied shades of *bicolor*; of ♀ more suffused with purple; the angular white cell-mark very slender; antemedian line with the outward curves much more equal in development than in *bicolor*, more as in *asterodia* Druce; postmedian at R³ not angled, at fold with lobe almost as strong as in *asterodia*; no purple-grey bandlike shade outside it between R³ and M³; subterminal white dot before R¹ minute, not noticeable.—*Hindwing* with postmedian line almost straight across the wing, posteriorly accompanied by some ochreous ternal shading; subterminal dot between SC² and R¹ white.—Underside of ♀ greyer than in *bicolor*; both sexes beneath with more nearly the markings of *asterodia*, the orange-brown subterminal patch of the forewing, however, faint in the ♂, moderate in the ♀. Hindwing beneath with the postmedian line as strongly bent as in *bicolor*, but not posteriorly so near tornus, the cell-mark rather large and strong, the buff and ochreous ternal shade strong; no pale terminal band.

Jamaica : Newcastle, type ♂ and allotype ♀ in coll. Tring Mus. ; 1 ♂ without exact locality in the same collection ; Cinchona, 6 December 1898 (W. J. Kaye), 1 ♂ in coll. L. B. Prout.

Certainly nearer to *asterodia* than to *bicolor*, possibly even a highly differentiated island race. The few specimens which passed through Mr. Warren's hands evidently baffled him, as the type is labelled by him "*incompta* Warr.," the allotype "*bicolor* Warr., ? = *asterodia* Druce" and the paratype "*behrensaria* Pack." (!).

18. *Pero albiorbis* sp.n.

♂, 41–42 mm. Near *castanea* Warr. (Nov. Zool. xi. 570) = *miplesetharia* Oberth. (*Et. Lép.* vi, fig. 1549). Wings appreciably broader and more rounded. Coloration paler, about as in *aeniasaria* Walk.—*Forewing* with the roundish white cell-spot large, absolutely without the pupil which is indicated or well-developed in *castanea*, the median area between this spot and the antemedian line scarcely differentiated in colour from the rest ; the characteristic olive-grey spots at costa and hindmargin also less sharply defined ; antemedian line less deeply projecting in cell ; postmedian dark, less oblique but slightly more sinuous ; a broad, but incomplete, sinuous pale subterminal present.—*Hindwing* with cell-spot smaller and weaker than in *castanea*.—Underside with postmedian of forewing blackish and nearly reaching hindmargin ; cell-spot of hindwing fairly large, but less dark-marked within than in *castanea*.

E. Peru : Huancabamba, Cerro de Pasco, 6,000–10,000 ft. (E. Boettger), 3 ♂♂ in coll. Tring. Mus.

I suppose *Eusenea* Walk. to be nothing more than a smooth-margined group of the great genus *Pero*.

19. *Pero leptoina* sp.n.

♂, 44–48 mm. Near *mathanaria* Oberth. (*Et. Ent.* vii. 25, t. i, f. 4).—*Forewing* with excision behind apex slightly less deep ; proximal area less differentiated (less mixed with dark grey), median area less bright, posteriorly more inclining to chestnut-brown ; cell-spot commonly without posterior extension or duplication ; postmedian with central concavity generally slighter, sometimes scarcely noticeable ; distal area rather paler, the colouring quite differently laid on, forming a multitude of extremely fine, long transverse striations, the dark presubmarginal spot between M² and SM² weak or obsolescent ; darkened apical patch narrowed, straighter-edged proximally.—*Hindwing* with tornal patch paler than in *mathanaria* ; fringe less bright.—Underside correspondingly less bright (greyer) and with the cell-spot of forewing simple, as above.

S.E. Peru : La Union, Rio Huacamayo, Carabaya, 2,000 ft., November 1904, wet season (G. Ockenden), type and another ♂ in coll. Tring Mus. ; Yahuar-mayo, 1 ♂ in coll. Brit. Mus., 1 ♂ in coll. L. B. Prout. Also single ♂♂ from Nouveau Chantier (French Guiana), Sarayacu (Ecuador), and San Gaban (Peru) in coll. Joiecy, and Codajas (Upper Amazon) and Allianca (below S. Antonio, Rio Madeira) in coll. Tring Mus.

This must be near to—possibly even a form of—the species which Dognin described (*Mém. Soc. Ent. Belg.* xviii. 186) from St. Jean du Maroni as *semi-brunnea*. As, however, some points in the descriptions do not tally and he does

not mention any close resemblance in his species to *mathanaria*, I can not yet assume them to be identical; if they are not, Dognin's species will need a new name, as *semibrunnea* is preoccupied by *Pero semibrunnea* (Warr.) = *Eusenea semibrunnea* Warr., *Proc. U.S. Nat. Mus.* xxx. 541.

20. *Pero teleclyta* sp.n.

♂, 43-48 mm. Similar to the brightest forms of *anceta* Cram. ♂ (*jimenezaria* Dogn.) but much more gay. Thorax with the narrow central crests brighter ochre. Abdomen above with an ochreous patch on the first two or three segments.

Forewing buff, shaded (especially in proximal area) with ochraceous; a very small purple-grey basal patch, generally also some cloudings in the middle of proximal area, though rarely strong; proximal edge of median band dentate, but entirely or almost entirely without the distal projection in cell; colour of the band light purplish grey with some ochreous scales, becoming narrowly bright brown at distal side; postmedian line more deeply incurved between R^1 and the posterior prong than in *anceta*, the form consequently beginning to suggest that of *constrictifascia* Warr. (1897); an olivaceous shade suffusing the distal area in the excavation, bounded distally by a nearly straight ochreous-brown line (this line, though often present in *anceta*, is there olivaceous).—*Hindwing* with the postmedian line not, or inappreciably, bent at M^2 .

Forewing beneath with a subterminal whitish patch between R^1 and M^1 , forming an anterior prolongation of the whitish posterior terminal area which is common to the two species.

Venezuela: San Esteban, June-August 1909 (S. M. Klages), a long series in coll. Tring Mus., commonest in June; also 1 ♂ from Las Quiguas, in the same district.

21. *Pero rapta* sp.n.

♂, 38 mm. Remarkably like *rapinaria* Guen., from S.E. Brazil, but with the antenna dentate-fascieulate instead of pectinate.—*Forewing* with a slightly stronger tooth at the end of R^1 ; coloration perhaps slightly darker; postmedian line more sharply angled at R^2 , the succeeding excavation slightly deeper.—*Hindwing* with the ochreous tornal patch rather smaller and less bright, some greyish lines which traverse it giving it a slightly more olivaceous tinge.

E. Peru: Huancabamba, Cerro de Pasco (E. Boettger), type in coll. Tring Mus., together with a second ♂, probably from the same district, merely labelled "Peru"; Chanchamayo, 1 ♂ in coll. L. B. Prout, 1 ♂ in U.S. Nat. Mus.

The impossibility of maintaining the separation of the supposed genus *Azelina* Guen. on ♂ antennal characters is well illustrated by this species and *rapinaria*, as well as by the *stuposaria-trailii* group, the *mathilda* group, and others.

22. *Pero caustomeris* sp.n.

♂, 43-49 mm. Very similar to *odonaria* Oberth. (*Et. Ent.* vii. 26, t. i, f. 5), which it appears very largely to replace in Peru.¹—*Forewing* broader, altogether brighter, the brighter hazel median area becoming broadly bright ochraceous-buff anteriorly, the pale band outside the subterminal line generally broader and

¹ The Tring Museum has from Carabaya (Ockenden's collecting) 39 *caustomeris* and 7 *odonaria*; the two were taken together at La Oroya and Santo Domingo.

whiter; antemedian line ending in a small white spot at hindmargin; postmedian straighter at costal end than in *odonaria*, subterminal thicker, notably from M^1 to tornus.—*Hindwing* with the teeth at M^1 and M^2 more pronounced; veins (and posteriorly the entire distal area) more suffused with hazel; tornal part of subterminal line (to M^2) thick.

Underside of forewing, and of hindwing anteriorly, in general more tinged with chocolate than in *odonaria*; forewing with white patch from tornus considerably larger.

S.E. Peru, Carabaya: La Oroya, Rio Inambari, 3,100 ft., common, including the type in coll. Tring Mus.; La Union, Rio Huacamayo, 2,000 ft.; Tinguri, 3,400 ft.; Santo Domingo, 6,500 ft.; Oconeque, 7,000 ft. E. Peru: Cushi, 1,900 m.; Huancabamba, Cerro de Paseo, 6,000–10,000 ft.; Marcapata, 4,000–4,500 ft. Colombia: Monte Tolima 2,700–3,200 m. A fine series in the Tring Museum and other collections.

P. odonaria (Oberth.) is known from Costa Rica, Venezuela, Ecuador, Peru, Bolivia, and Brazil and shows some slight racial variation, but nothing that can be confounded with *caustomeris*.

23. *Pero ognopoea* sp.n.

♂ ♀, 46–48 mm. Like *odonaria* Oberth. but with the median area of the forewing from R^1 to hindmargin darker, especially from M and R^3 hindward—between auburn and chestnut-brown of Ridgway ("Color Standards and Nomenclature"); postmedian line of hindwing less sinuous, on the underside almost straight, only with the slightest outward curve, entirely without the bold sinuosities which are a feature in all the forms of *odonaria*. The forewing has the white cell-mark almost as long as DC^{2-3} , well angled at R^2 (occasionally broken into two dots); the white patch from tornus of forewing beneath is narrow, but reaches R^3 .

S.E. Peru: Carabaya, La Union, Rio Huacamayo, 2,000 ft., December 1904, wet season, type ♂; Santo Domingo, 6,500 ft., November 1904, wet season, allotype ♀; both in coll. Tring Mus. N.E. Peru: Oxapampa, 6,400 ft., 1 ♂ in coll. L. B. Prout. N. Peru: Rentema Falls, Upper Maranon, 1,000 ft. (A. and E. Pratt), 1 ♂ in coll. Joicey. Colombia: Pacho (A. H. Fassl), 1 ♀ in coll. Joicey.

24. *Pero amica fructuosa* subsp.n.

♂, 38–44 mm.; ♀, 43–47 mm. On an average larger and ampler-winged than *a. amica* Butl. 1881 (S.E. Brazil); darker (notably on the hindwing and underside) and with the prevailing grey tone of that race changed to brown, more or less strongly inclining to reddish. Moderately variable, but always strikingly distinct.

S.E. Peru, Carabaya, chiefly at high altitudes: Agualani (loc. typ.) and Limbani, 9,000–9,500 ft., abundant; Oconeque, 7,000 ft., a few; Rio Huacamayo, 3,100 ft., 2 ♂♂. A fine series in various collections (G. Ockenden), the type in coll. Tring Mus.

25. *Pero spitzi* sp.n.

♂, 41–42 mm. In structure and shape close to *amica* Butl., the hindwing slightly less elongate costally and more fully rounded apically. Antennal pectinations, as in *amica*, very short (scarcely 1). Thorax above predominantly

quaker-drab, abdomen (especially anteriorly) somewhat suffused with that colour.

Forewing with proximal and median area quaker-drab irrorated with black, darkening towards the postmedian line; antemedian rather more blackish, thrice excurved, but with the curves—notable the one in cell—conspicuously shallower than in *amica*; some vinaceous suffusion towards the base; postmedian line shaped as in *stolidata* Guen. (= *adrastaria* Oberth. 1883); distal area pallid quaker-drab with the veins more whitish-buff and with a cloud of pinkish and cinnamon suffusion outside the postmedian line, almost obsolete costally, narrowing about the radials, broadening behind, at hindmargin reaching tornus; slighter, more olive-grey terminal suffusions anteriorly; some small black, distally white-edged interneural dots at termen.—*Hindwing* more drab or hair-brown, the costal and distal areas a little paler, the postmedian obsolete at costa, weakly bent at R¹, then straightish, the brown clouding beyond it weak, except at posterior end; terminal dots not white-tipped.

Underside somewhat as in well-coloured examples of *amica*, but the hindwing with the cell-spot very small or obsolescent, the characteristic white terminal dot of cellule 6 wanting, the postmedian line more proximal, the brown shades brighter, more chocolate, developed into ill-defined subterminal bands, that of the forewing only reaching from apex to R², that of the hindwing broad anteriorly, narrowing to tornus.

♀ larger, rather less bright.

S.E. Brazil: Alto de Serra, São Paulo, September 1922—January 1923 (R. Spitz), 6 ♂♂ in coll. Tring Mus., including the type; 13 December 1912 (E. D. Jones), ♀ allotype in coll. Brit. Mus.; Castro, Parana (E. D. Jones), 1 ♂ in coll. Brit. Mus.

26. *Pero homodoxa* sp.n.

♂. Marvellously like *semiusta* Butl. (1881), with which it has always been mixed. Structurally distinct in having the lamellae of the antenna developed into projecting teeth or rudimentary pectinations, the longest of which are nearly as long as the diameter of the shaft. *Forewing* on an average less bluish grey, more sharply variegated, but with the ferruginous shade proximally to the postmedian often more restricted, or at the costa subobsolete, the grey band beyond the postmedian, on the contrary, often reaching the costa; more constantly distinguishable by having in the cell—sometimes reaching the cell-spot, sometimes shorter—a diffuse blackish extension of the prong of the antemedian line. *Forewing* beneath often with a more or less definite dark-grey cloud in base of cellules 2 and 3.

S.E. Peru, Carabaya: Santo Domingo, 6,500 ft., a long series, including the type, in coll. Tring Mus.; La Oroya, Rio Inambari, 3,100 ft.; Rio Inambari, 6,000 ft.; Rio Huacamayo, 1,000 ft. Also from Loja, from some localities in E. Peru, particularly Huancabamba, Cerro de Pasco, 6,000–10,000 ft., and from Bolivia, Yungas de la Paz.

In a series of 37 *homodoxa* and 56 *semiusta* in the Tring Museum, which were sorted by the ♂ antenna, every specimen conforms to the test of the dark suffusion in the cell, but as it is short in a few cases in *homodoxa*, while a very few of the *semiusta* from La Oroya show a slight thickening of the postmedian prong in the cell, it is not impossible that it may be found to break down in

rare aberrations, as is so frequently the case with individual characters derived from wing-markings in the closest allies.

27. *Pero brynhilda* sp.n.

♂ ♀, 46–50 mm. Larger than *mathilda* Butl. (1881), rather ampler-winged. Antennal pectinations of the ♂ still shorter (even the outer series not exceeding 1). Genitalia of the ♂ without the remarkably long, projecting, spiked valves which are characteristic of *mathilda*.

Forewing of ♂ with the ground-colour in basal area and especially between the postmedian line and the subterminal pale grey, as in *semiusta*, not brown, as in *mathilda*; the composite black cell-mark with its posterior spot usually enlarged, oftenest extended longitudinally, tapering proximal; the yellow spot outside it lighter and nearly always broader than in *mathilda*, the incomplete grey streak distal to it obsolete or extremely weak, except in the forms from Cushi and Huancabamba (in *mathilda* black-grey, strong from near costa at least to M²); the zigzag subterminal line generally weaker and rather more pinkish than in *mathilda*.—*Hindwing* with the line—at least posteriorly—rather more proximally placed than in *mathilda*.

Underside of a slightly different brown from that of *mathilda* (more inclining to purplish in *homodoxa*, to orange in *mathilda*) and with the colour-blends rather softer.

The only ♀ yet known (Limbaní, 9,500 ft.) is brown, but of a more purplish shade than that of *mathilda* and easy to place on account of its large size, the shape of the markings and the weakness of the subordinate ones, apart altogether from the fact that *mathilda* is not yet known from a higher altitude in Carabaya than 7,000 feet (one ♂ from Oconeque).

S.E. Peru, Carabaya: Agualani, 9,000–9,500 ft., 10 ♂♂ in coll. Tring Mus., including the type; Oconeque, 7,000 ft., 4 ♂♂; Limbaní, 9,500 ft., 2 ♂♂, 1 ♀.

A race (?) from E. Peru (Cushi and Huancabamba) is slightly intermediate in coloration towards *mathilda*, especially so in the five Cushi examples before me.

28. *Pero circumflexata* sp.n.

♂, 44–45 mm. Similar to a dark *clysiaria* Feld. (*Reise Novara, Lep. Het.* t. exxiii, f. 12)—colouring of *coracina* Warr. (Nov. Zool. xiv. 318). Distinct from the ♂♂ of both in having the termen of the forewing more strongly toothed at R¹ and M¹, that of the hindwing rather more curved from apex to the tooth at R³, which is directed less distad, more towards the tornus; mid-terminal suffusion of both wings cinnamon, not grey; the white cell-mark of the forewing an obtuse V or circumflex accent, that of the hindwing very small, drop-shaped, almost punctiform.

Peru: Huancabamba, Junin, 3,000 ft., February 1905 (Boettger), type ♂; Chanhamayo (Schunke), 2 ♂♂; Santo Domingo, Carabaya, 6,000 ft., November 1902 (Oekenden), 1 ♂; all in coll. Tring. Mus.

29. *Pero steinbachi* sp.n.

♂, 35 mm. Similar to *vetustaria* Walk. (1866), from the West Indies. Antennal pectinations slightly shorter.—*Forewing* with the teeth of the termen still slighter, little noticeable, a black dot present though very small, postmedian line straight from costa to R³, the inward curve between this and the lobe at fold

thus reduced in length and depth, the dots close to termen obsolete; coloration variable as in *vetustaria*, in the type buffy brown with a suffusion of olive, in the paratype nearly cinnamon in proximal and median areas.—*Hindwing* with the postmedian line straighter and less oblique (more proximal at costa) than in *vetustaria*, the dots close to termen obsolete, excepting the last one or two.—Underside much more weakly marked than in *vetustaria*, the dots close to termen wanting, the white postmedian line not or scarcely dark-edged proximally, the cell-mark of the hindwing vestigial.

♀, 37–40 mm. With the usual sexual distinctions of the group, the distal margins being highly dentate (much as in *astapa* Druce ♀), the coloration richer or warmer, though equally variable. *Hindwing* beneath with the cell-mark slightly less obsolete than in the ♂.

E. Bolivia: Buenavista, July–October 1906 (J. Steinbach), 2 ♂♂, 3 ♀♀, in coll. Tring Mus.

30. *Pero isotenes* sp.n.

♂, 42 mm. Near *xylitaria* Guen. (Oberth., *Et. Léop.* vi, fig. 1563). Antennal joints more serrate, with fascicles of short cilia.—*Forewing* with R² more forward (from one-third DC); in general slightly paler, in particular without the dark longitudinal streak in front of R³; antemedian line distinct from all the allies (*xylitaria* Guen., *cyclodaria* Feld., *albiditata* Prout) in that its anterior tooth (in cell) is at least as long as its posterior one, though without the heavy black shading of the latter; cell-spot white, but much smaller and narrower than in *cyclodaria* and *albiditata*, weakly margined with brown and with a blackish dot at its hinder extremity; subterminal striae between hindmargin and M¹ more nearly parallel with termen than in *xylitaria*, midway between postmedian and termen condensed into a thick dark line or streak.—*Hindwing* with the postmedian line rather proximally placed, on the underside with a very pronounced indentation between the radials.

Colombia: Torné, Cauca Valley, type ♂ and another in coll. L. B. Prout; Cañon de Tolima, 1 ♀ (worn) in coll. Tring Mus. Venezuela: 1 ♂ in coll. Brit. Mus.; Merida, 2 ♂♂ (worn) in coll. Tring Mus.

This species was unfortunately misidentified in the British Museum and (consequently) in my collection as *cyclodaria* Feld. and is referred to under that name in Nov. Zool. xxiii. 189, under "*Meticulodes*" *albiditata* Prout. Felder's figure is practically unrecognizable and the mistake was only discovered on a study of his rather poor type, likewise from Venezuela. I now believe that my *albiditata* is merely a large, broad-winged race of true *cyclodaria*; the Peruvian forms are rather intermediate between the W. Colombian and Felder's type, though nearer to the former, while 4 ♂♂ and 2 ♀♀ from Baeza, E. Ecuador, recently acquired by Lord Rothschild, seem to forge a further link. Confirmatory material from Venezuela, however, is still wanting.

I think the generic name *Meticulodes* Guen., if conserved at all, should be restricted to *spongiata* Guen. (= *tripilunata* Prout) and *beatricaria* Oberth. (1883), in which SC² of the forewing arises from the stalk of SC³⁻⁵.

31. *Pero crepusculascens* sp.n.

♂, 44–45 mm. Antenna, as in the nearly allied *mitraria* Oberth. (*Et. Léop.* vi, fig. 1552), with projecting teeth, nearly as long as diameter of shaft. Both

wings with termen and fringe appreciably more crenulate.—*Forewing* less bright—very little browner than in *obfuscata* Warr. (1895) and *anniculata* Warr. (1907); antemedian more strongly projecting in cell, though not quite so acutely angled as in *anniculata*.—*Hindwing* less blackened than in *mitraria*, the costal and apical regions rather broadly white-mixed.—Underside similarly more pale-irrorated than in *mitraria*, the forewing more broadly whitish posteriorly, the hindwing with the postmedian line more distally placed, the area outside it less bright brown and with indications of whitish subterminal line, outside which the colour becomes paler.

E. Ecuador : Baeza, March 1915, 2 ♂♂ in coll. Tring Mus.

The type form has apparently slightly less broad forewing than *mitraria*, but two worn ♂♂ from Monte Tolima, Colombia, which seem clearly conspecific, are at least as ample-winged as Oberthür's species.

From *anniculata*, wherewith it might easily be confused at first glance, *crepusculascens* differs in the antenna and in the larger cell-spots, with that of the hindwing conspicuous beneath.

32. *Gonodontis justa* sp.n.

♂, 55 mm. Nearest to *bilinearia* Swinh. (1889). Antenna rather slenderer, with the pectinations shorter—little over 1 in *justa*, about 2 in *bilinearia*.—*Forewing* with the tooth at end of R¹ stronger, the excavation behind it deeper, approaching the shape of *similaria* Moore; rather bright cinnamon-buff, the grey irroration being quite weak; discal ocellus rather more elongate (transversely) than in *bilinearia*, with its dark proximal edging twice as broad as its distal; postmedian line rather straighter and not nearer to the termen at costa than at hindmargin.—*Hindwing* with the discal ocellus rather larger than in *bilinearia*, but less black.

Khasis, November 1894, 2 ♂♂ in coll. Tring Mus. (including the type), 1 ♂ in coll. L. B. Prout.

33. *Gonodontis nubigosa* sp.n.

♂, 49 mm. Structure and general facies of *imitata* Warr. (Nov. Zool. iv. 115), the type of Warren's genus *Cenoctenucha*, only with SC² of forewing arising more proximally and with the terminal teeth considerably stronger, though less extreme than in *similaria* Moore. Body and wings darker, the forewing, excepting the pale termen, varied with cinnamon and russet, the median area towards postmedian line more snuff-brown; median area of forewing broad, at costa 13 mm., at hindmargin about 6; antemedian sharply angled at both folds, postmedian nearly straight, both with the whitish vein-dots sharp.—*Hindwing* with cell-spot and postmedian stronger than in *imitata*, the latter beneath not dentate.

Szechwan : Kunkala-Shan, type ♂ in coll. Tring Mus.

34. *Aspitates gonarcha* sp.n.

♂, 43–44 mm. Near *acuminaria* Eversm.—*Forewing* with termen slightly more waved, at least anteriorly, between apex and R³ appreciably concave, at R³ distinctly bent; antemedian line not bent at fold, on the other hand slightly curved or bent at SM²; postmedian distinct to costa, which it reaches at 5 mm. from apex, slightly oblique inward to just behind SC⁵, then suddenly

excurved, the hinder side of the excurved portion returning more gradually; the band-like shade outside moderately broad in all the examples, reaching the costa, posteriorly widening from M^2 to hindmargin.—*Hindwing* with termen anteriorly much more dentate than in *acuminaria*, the tooth at R^2 made particularly prominent by a noticeable sinus between this and R^1 ; postmedian straightish, the shading outside it broad, subtriangular between costa and M^2 , with the apex of the triangle at radial fold quite near termen.

Underside with the dark clouding only strong on forewing proximally and in a rather broad subterminal band which narrows and weakens posteriorly.

Afghanistan: Prov. Kuliab, 3 ♂♂ in coll. Tring Mus.

35. *Nothofidonia xenoleuca* sp.n.

♂, 34–38 mm. Near *ansorgei* Warr. (Nov. Zool. viii. 16), possibly a subspecies. Head and body nearly as in that species. Wings white, only becoming buff at the extreme base and costal edge of forewing and on the hindwing fringes, which are not chequered with black as in *ansorgei*.—*Forewing* with the central longitudinal band narrower and more sharply defined, less ragged at its edges and continued to the termen, though sometimes containing a small terminal black spot; anterior longitudinal band variable, generally broader and shorter than in *ansorgei*, more sharply defined, generally more distal.—*Hindwing* with the abdominal border more broadly blackened or black-irrorated than in *ansorgei*, the costal border also broadly black or black-irrorated.

Abyssinia: Wolisso, between Hauash and Omo, 3–4 June 1925, 10 ♂♂, including the type; N. bend of Omo, 1 June 1925, 1 ♂; all in coll. Tring Mus., collected by O. Neumann.

36. *Myrioblephara finitima* sp.n.

♂, 24–27 mm.; ♀, 27–28 mm. Close to *minima* Warr. (Nov. Zool. x. 393) but less small (expanse of *minima* 21–22 mm.). Hindtarsus of ♂ less short (2 mm. against 1.5), the tibial hair-pencil perhaps less thick, the abdominal spine shorter. Abdomen with the white basal belt generally more restricted.—*Forewing* with postmedian line less inbent at fold, the narrow shade outside it generally marked with distinct dark dashes on the veins.—*Hindwing* with the median area, instead of being brown as in *minima*, almost as white as basal, traversed (at least posteriorly) by a somewhat sinuous median line, which is as distinct as the antemedian and nearer to it than to the postmedian; postmedian less outbent at R^2 – M^1 than in *minima*.

Dutch New Guinea: Mount Goliath, 5,000–7,000 ft., January and February 1911 (A. S. Meek), 5 ♂♂, 4 ♀♀, including the type ♂. British New Guinea: Angabunga River, 1 ♂, 3 ♀♀, misidentified by Warren as *confusa* Warr.

37. *Tephрина benguellae* sp.n.

♂ ♀, 28–35 mm. Close to *punctilinea* Prout (*Ann. S. Afr. Mus.* xvii. 69, xix. t. xvi. f. 26, *Peridela*). Antennal pectinations of ♂ slightly less short and thick (about 2). Wings not noticeably tinged with ochreous on the veins or about the lines; median line strong throughout, often thickened, on hindwing always proximal to the cell; postmedian line strong, thickened (or, in the less strongly-marked specimens, marked with two large dots) at R^2 – M^1 ; distal area

wholly or largely dark-shaded, bearing a double or confluent dark mark between R^3 and M^1 near the postmedian and a fainter one between M^2 and SM^2 , at least on forewing. Underside likewise more sharply marked, the antemedian line of the forewing generally distinct, the distal dark shade very strong, on forewing reaching termen in anterior half or nearly throughout, a pale spot, however, always developed or indicated between R^3 and M^2 .

Benguella: Talala, 1 December 1905, type and two other ♂♂; Batt, 29 November 1905, 6 ♂♂, 1 ♀; Fort Quilenges, 7 January 1905, 1 ♀; all in coll. Tring Mus., collected by Dr. Ansorge.

As *Peridela* only differs constantly from *Tephрина* in the (often only very slightly) irregular termen of the hindwing, I have sunk it to Guenée's genus (cf. Nov. Zool. xxxiii. 186-7). The present species, *crassata* Warr. (1897) and *punctilinea* Prout, form a very natural group and are perhaps subspecies of a single unit, in spite of the (very slightly) shorter pectinations of *punctilinea*. All have the face slightly protuberant, somewhat chitinised above and a very small, easily abraded, projecting cone of scales below (lost in the originals), transitional towards *Hystomodes* Warr. *T. crassata* is rather large, long-winged and dusky brown, the forewing with a rather distinct white subapical dot, and is the only form known from N.E. Rhodesia; *punctilinea*, from Bechuanaland and S.W. Africa, is the palest and most uniformly small, with punctiform postmedian line, median of hindwing crossing the cell-dot, etc. Except in a few specimens of *punctilinea*, SC^{1-2} of the forewing is free in all the material yet known.

38. *Tolmera culminata* sp.n.

♂, 51-52 mm. Larger than *albibasis* Warr. (1903).—*Forewing* with the pure white basal spot reduced to a few inconspicuous whitish scales; lines less mixed with brown; antemedian almost straight from costa to SM^2 , here dentate outward, thence oblique inward to hindmargin; a conspicuous black spot between this and fovea, some black dashes at costa and a slight black admixture behind SM^2 , the basal area otherwise clear; proximal subterminal shades broad, especially between M^1 and SM^2 ; apical patch more conspicuously pale than in *albibasis*.—*Hindwing* and underside rather darker than in *albibasis*, the forewing beneath rather uniformly so, almost obliterating the markings and bringing into strong relief the pale apical patch.

Dutch New Guinea: Mount Goliath, 5,000-7,000 ft., January (type) and February (paratype) 1911 (A. S. Meek), both in coll. Tring Mus.

39. *Zamarada euerces* sp.n.

♂ ♀, 29-34 mm. Near *phrontisaria* Swinh. (*Tr. Ent. Soc. Lond.* 1904, p. 517), especially in the distal borders.—*Forewing* slightly shorter (termen less oblique anteriorly); translucent green instead of bronzy;¹ transverse pinkish-grey strigulation rather well developed; cell-spot larger, in both species a rhombus, in *phrontisaria* slightly, in *euerces* broadly pale within; distal area scarcely so white proximally, the angular dark markings ("sinuous thin band" of Swinhoe) more proximally placed.—*Hindwing* with cell-mark rather larger and darker

¹ Swinhoe has omitted to mention the colour, which is a very characteristic feature of his species; it varies according to the incidence of the light, so that it may appear more ochreous or pink, but never green.

than in *phrontisaria*; angular markings of distal area narrowed or obsolete outside the broad central bay of the ground-colour.

Sierra Leone, type ♂ in coll. Tring Mus. Ivory Coast; Bingerville (G. Melou), a ♀ in the same collection. Cameroons, interior: Satschi, 21-25 May 1909 (Riggenbaeh) in coll. Zool. Mus. Berlin. S. Cameroons: Epulan, 30 March 1926 (G. Schwab), a ♂ in coll. Joicey.

Z. euerces phygas subsp.n. ♀, 29-30 mm. Cell-mark of forewing less large (about as in *phrontisaria*); borders on an average narrower.

Tanganyika Territory: Mikindani (Reimer), type in coll. Zool. Mus. Berlin; Tendaguru, Lindi dist. (Jamisch), paratype in coll. Joicey.

40. *Zamarada acrochra* sp.n.

♂ ♀, 31-35 mm. Head, antennal shaft, and costal margin of forewing bright orange (capueine yellow), dark-spotted. Collar nearly as bright. Antenna in ♂ pectinate to fully three-fifths, the branches long. Hindtibia of ♂ rather strongly dilated, with hair-pencil. Thorax and abdomen above of the usual pale violet-plumbeous, the abdomen more mixed with light brownish vinaceous and with small yellow crests.

Forewing pale translucent green, with the strigulation moderate; extreme base concolorous with thorax; cell-mark narrow, elongate, generally weak, never intense; postmedian black line somewhat erenulate, from costa at beyond two-thirds in ♂, about two-thirds in ♀, to hindmargin at about the same, the bay between R^3 and M^2 moderate or rather shallow (generally well under one-half breadth of distal area), its proximal angle at R^3 rather rounded off, that at M^2 squarer, its distal end rarely indented on M^2 ; distal area vinaceous brown or somewhat lighter and more reddish; the subterminal triangles darker brown, acute except opposite the bay, the dentate subterminal line pale buff; fringe chequered, orange-brown and blackish.—*Hindwing* with cell-mark still weaker or obsolete; distal markings as on forewing, or with the bay deeper.

Forewing beneath with costal margin duller, cell-mark rather stronger, border very dark proximally (blackish bone-brown), fading off towards fawn-colour distally, with the apex conspicuously paler, recalling that of *excavata* B.-Bak. Border of hindwing similarly coloured, without broadened pale apex.

Senegal: Sédhiou (H. Castell), 2 ♂♂, 3 ♀♀ in coll. Tring Mus., the type ♂ dated 17-25 July 1917. Also from Sierra Leone, Ivory Coast, Nigeria, Cameroons, and Congo.